



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,015	01/10/2002	Gregory Floyd	044123-1633	5204

4743 7590 04/21/2004

MARSHALL, GERSTEIN & BORUN LLP  
6300 SEARS TOWER  
233 S. WACKER DRIVE  
CHICAGO, IL 60606

EXAMINER
----------

WUJCIAK, ALFRED J

ART UNIT	PAPER NUMBER
----------	--------------

3632

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/046,015

Applicant(s)

FLOYD ET AL.

Examiner

Alfred J Wujciak III

Art Unit

3632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-17 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-16 is/are allowed.
- 6) ☒ Claim(s) 1-4,6-13,17 and 25-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- ☐ Interview Summary (PTO-413) Paper No(s). 4.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 3632

### **DETAILED ACTION**

This is the third Office Action for the serial number 10/046,015, Roof Support with Integral Gutter, filed on 1/10/02.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the maximum expected deflection of the roof support" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 12-13 recite the limitation "roof support" in lines 1-3. There is insufficient antecedent basis for this limitation in the claim.

In this situation with "roof support", the examiner is assuming that the applicant intend to cite ---support web---.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

Art Unit: 3632

has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3,7, 9,12-13, 17 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent # 6,279,290 to Richardson.

Richardson teaches a roof structure (figures 1-2) comprising a vertical support web (10), an exposure surface (12), and a collector (50). The support web integral with and perpendicularly bisecting the exposure surface and the collector. The exposure surface includes flanges(30) projecting outwardly in opposing lateral directions. The collector has flanges (53) projecting outward in opposing lateral directions. Each flange having a distal edge (55) upwardly extending from the flange at an angle of 90 degrees. The exposure surface and the collector are integral with the support web (figures 1-2). The distal edge (slanted end of element 55) is general parallel to the upper part of support web (triangular edge adjacent element # 22). The distal edge has a downwardly extending end (46).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3632

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson.

Richardson teaches the distal edge but fails to teach the distal edge extends from each flange at an angle of 125 degrees. Furthermore, Richardson fails to teach the collector has a depth greater than the maximum expected deflection of the support web. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified the distal edge to 125 from 90 degrees to provide an additional support for supporting a roof panel and the dept of collector greater than the maximum expected deflection of the support web to provide additional storage on the collector for collecting water thereon.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of US Patent # 6,085,469 to Wolfe.

Richardson teaches the roof structure but fails to teach the roof structure is manufactured by extrusion process. Wolfe teaches a structural connector manufactured by extrusion process (col. 1, lines 50-52). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have used Richardson's roof structure through the extrusion process as taught by Wolfe to provide a convenience in forming the roof structure.

Claims 10-11 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of US Patent # 6,449,910 to Budd.

Art Unit: 3632

Richardson teaches the roof panel having but fails to teach a drip edge extending longitudinally along the interior surface of the roof panel. Budd teaches the roof panel (150) having a drip edge (10) extending longitudinally along the interior surface of the roof panel. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have added the drip edge to Richardson's roof panel as taught by Budd to provide a designer's preference for the water to travel under the roof.

***Allowable Subject Matter***

Claims 14-16 are allowed.

In regard to claims 14-15, the prior art fails to teach at least one flange of the exposure surface of the roof support includes an arcuate channel. In regard to claim 16, the prior art fails to teach the roof structure has a modulus of elasticity of at least about 2,500,000 pounds per square inch.

***Response to Arguments***

Applicant's arguments filed 12/29/03 have been fully considered but they are not persuasive.

With respect to applicant's argument on page 6 stating that Richardson does not teach exposure surface integral to the support web and that the exposure surface is removably connected to the support web. Once the exposure surface is connected to the support web, the exposure surface is integral to the support web. "Integral" in Merriam Webster's Collegiate

Art Unit: 3632

Dictionary states that it is formed as a unit with another part. Exposure surface is a part and support web is another part, which together form as a unit after connecting with each other.

The applicant disagree that Richardson teach flanges that project outwardly in opposing lateral directions and that they project in the same downward direction. Figure 2 in Richardson's invention clearly show that the flanges (30) are projecting outwardly in opposing lateral direction. If they were in same direction, there will be only one flange because one of the flanges will be integral with each other. Since the flanges are in angle direction, they are in lateral and longitudinal directions.

On page 7, the applicant argues that Richardson fails to teach the exposure surface having a "slight negative slope" nor does it have a slope that "corresponds" to a slope of the roof panel. Figure 7 of Richardson's invention shows that the exposure surface is facing downwardly which create a negative slope and the roof panels are also facing downwardly which the panels are also in negative slope.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir.

Art Unit: 3632

1992). In this case, it is an obvious to have added Budd's drip edge to Richardson's roof panel to collect the water sliding off panel. Budd shows the drip edge having two parts, one is for straight edge and other for the corner edge. The straight edge is the only part that the examiner is using to modify Richardson's reference. The corner edge part is not required for using the obvious rejection since the straight edge stands alone.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Joseph Wujciak III whose telephone number is



Art Unit: 3632

(703) 306-5994. The examiner can normally be reached on 8am-4:30pm.

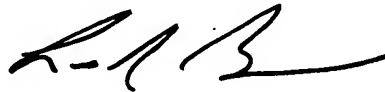
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leslie A Braun can be reached on 703 308 2156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alfred Joseph Wujciak III  
Examiner  
Art Unit 3632

4/19/04

AW



LESLIE A. BRAUN  
SUPERVISORY PATENT EXAMINER